DOCUMENT RESUMF

ED 248 661 EC 170 440

AUTHOR Willings, David
TITLE The Creative Inventory.
PUB DATE Jun 83
NOTE 20p.; Paper presented at the Meeting of the Canadian Association of College and University Counsellors (Prince Edward Island, Canada, June 1983).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Counseling Techniques; *Creative Development; *Creativity; *Gifted

ABSTRACT

The paper examines variables involved in creativity and suggests ways in which gifted adolescents may be helped to isolate conditions under which they get their best ideas. Among variables considered are the hypnagogic state (physical and mental condition just before sleep), the hynopompic state (physiological and mental condition upon awakening), the diurnal variation (times of peak activity), dreams, the "presque vu" experience (and idea on the brink of awareness), continuity of attention, simultaneous attention, distraction tolerance, postural conditons, and resumption. Examples of creative individuals and these variables are cited along with the author's own creative inventory. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED248661

The Creative Inventory

Dr. David Willings

Paper presented to Canadian Association of College and University Counsellors
Prince Edward Island June 1983

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
David Willings
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC170440

Introduction

I am going to start with two cases. Mary (assigned name) was an artist and stage designer in her early twenties. She felt that she had creatively dried up and had in her own words been "producing thoroughly worthless work for the past two years". Ideas were just refusing to come. She had tried to get her ideas flowing again by the use of LSD. The effects had really frightened her. Her boy friend also tried LSD. Under its effects he perceived Mary's tubes of paint as delicacies and tried to eat them. Ingesting vast quantities of oil paint made him very ill. This frightened Mary. Mary's father was a family doctor and Mary talked with him. She did not feel able to say to her father that she was on LSD but she told him that she had a friend who was trying it. The doctor told his daughter in no uncertain terms that LSD is very highly dangerous. Mary resolved never to use it again. However, this threw her back on her problem. When she came to me for counselling she was seriously thinking of suicide. She told me "If I've reached my peak and all I can produce now is worthless wor'. I don't intend to go on living". She had devised a means. She would swim out to the sea in the middle of the night and drown. When someone devises a means of suicide, especially one which has a very high chance of being successful, any counsellor knows the problem is serious in the extreme. Mary meant business. She really meant that life had no more to offer.

Gerald (also an assigned name) was an Assistant Professor of English. He had a very impressive record of academic publications but his real motive was to write novels, poems and short stories on the futility and bestiality of war. Gerald was a convinced pacifist. He had written a novel on a German officer in Italy in 1944 who had fallen in love with an Italian nun. He was not satisfied with the novel, but could not think of the idea that would enable him to get his point across. He was also at a loss for ideas for poems and short stories. He thought that being in a state of mild drunkeness might liberate his ideas. Slightly drunk on wine his ideas still did not come. He increased his drinking. Ideas still refused to come. He decided he was creatively finished. He moved onto scotch and began to drink more heavily. Matters came to a head when his wife asked for a statement on their joint account and found that there was only $14.35 in the account. She realized that Gerald had been spending large parts of his and her salary on drink. She insisted he seek help. By that time of course Gerald was an incipient alcoholic. As many of you know the alcoholic is often the last person to admit he needs help. Gerald's wife had read my book The Creatively Gifted and persuaded him to see me.

Both of these people were helped. They were helped to work out the conditions under which the creative flow could be liberated for them. I am going to discuss these conditions and then share with you exactly how these two people were helped. Before I do that, however, I feel I must briefly explain why I feel it necessary to go into this for a group largely composed of teachers and parents. There are three reasons.

i) I believe it will help you enormously to be able to do a creative inventory on yourself. If you can isolate the conditions under which you are creatively liberated you can seek out these conditions and this can only result in an opening up of the scope and quality of your work.

ii) By the age of fourteen these conditions are operative for those we are trying to help whether as teachers, parents or counsellors. If we have done an effective creative inventory on ourselves then we can go on to help others to do a creative inventory on themselves and this can only result in facilitating the flow of creative ideas.

iii) If we are going to prepare the gifted for adult life an essential part of that preparation is to enable them to maximize their creative growth. One way they can do this is by compiling a creative inventory.

Creative liberation

William James (1880) suggests that there are two things to be considered. These he calls periods of outpouring and periods of effort. I am going to suggest that different conditions operate for both these periods and that it is possible for us to enhance and facilitate both periods of outpouring and periods of effort in ourselves and in gifted adolescents we are trying to help. Wallas (1926) suggests that there are four phases in the creative process. The first is preparation. The second is incubation. During this stage the unconscious mind is processing ideas with the individual being largely unaware of it. This is followed by illumination when the ideas come into awareness. Illumination is followed by verification.

I am also going to give some attention to the conditions favourable to incubation again in the hope that you will be able to seek these out for yourself and help young people to seek them out and profit by them. Tchaikowski, quoted in Harding (1940) suggests that the creative mind is working to meet the creative mood half way. By isolating the conditions under which this is possible we can greatly facilitate this very process - the process of meeting the creative mood half way and alleviate a great deal of frustration.

The variables

Harding has documented a wealth of information on how eminently creative people get their best ideas and do their best work. Her admirable book was published in 1940 and very regrettably is now out of print. Since that time our knowledge of mental processes has advanced considerably and it is now possible to relate her work to modern psychological findings. A number of variables have to be considered. These include:-

The hypnagogic state is the physiological and mental condition just before going to sleep. The person in this state is not yet asleep but is no longer awake.

The hypnopompic state refers to that physiological and mental condition where the person is emerging from sleep. The person is not completely awake but no longer asleep.

The diurnal variation refers to times of peak activity. Individuals can be subdivided into two categories, owls and sparrows. Some people are at their best early in the morning. Others work better in the early evening. There are even some who work best at night.

Dreams are now known to be a reflection of unconscious mental processes. In some cultures dreams are held to have a prophetic significance.

The "presque vu" experience has afflicted all of us from time to time. Some idea is on the brink of awareness but it is impossible, at that time, to get it into awareness. There is something in our mind but we cannot put our finger on it.

Continuity of attention is a necessity for some people. When an idea has come such people find it necessary to work at it to the exclusion of everything else.

Simultaneous attention is the opposite of continuity of attention. Many people find it necessary to have several projects going at the same time.

Distraction tolerance varies from individual to individual. Some people find even the most minor distraction destroys their flow of thought. Others can work through the most overpowering distractions.

Postural conditions under which people get their best ideas vary enormously. I have never yet met anyone who gets his best ideas sitting at a desk.

Resumption refers to the process of getting ideas to flow again when for some reason the flow has been interrupted. Sometimes the flow seems to interrupt itself. We have all of us experienced times when in the middle of some project the ideas stop coming and we seem, as it were, to have run out of fuel. I use that metaphor deliberately. Different people have different ways of getting the ideas to flow again.

Periods of outpouring

Harding gives numerous examples of how different people bring ideas from the incubation to the illumination stage. I have made liberal use of her examples and supplemented them with examples from the research currently being carried out by myself and a graduate student Cindy Bruce.

McKellar (1957) reports that Ray Bradbury, the science fiction writer, gets all his best ideas in the hypnagogic state. A research scientist told me that he gets his ideas before going to sleep but they inevitably wake him up and then he has to spend several hours of the night setting them down on paper. Some people get their best ideas in the hypnopompic state (emerging from sleep). Wagner reported this. The research psychologist W.H. Rivers found his ideas came at this time. The eminent mathematician Lamberton had been struggling with a problem for months. One morning while waking up he saw the solution in the form of a diagram on the wall.

The diurnal variation affects receptivity to ideas emerging into awareness. Lewis Carrol got all his ideas at night. Pavlov was at his creative peak between 8:30 and 9:30 in the morning.

Tne transition from incubation to illumination sometimes occurs in dreams. Kekulé claims that the idea for the benzene ring came to him in a dream. In fact he had been working on the idea and it was during sleep that the "hooked atoms collided". The archaeologist, Hilprecht, had been trying for some time to decipher a Babylonian inscription. He claims that the solution came to him in a dream. Again it did not actually come to him in the literal sense. He had been making efforts to work towards a solution and his own ideas fell into place while he was asleep.

Distractions can destroy the thread of ideas from some people. Coleridge was interrupted and lost the last lines of Kubla Khan. He never got them back. For some people distractions have the opposite effect. Schubert wrote what he felt to be one of his compositions on the back of a menu in a crowded tavern on a Sunday afternoon. Swinburne claims that the idea for a poem came to him during a thunderstorm.

As far as postural conditions are concerned there is wide variety. Mark Twain and Debussy both got their best ideas walking to and fro in a room. Goethe got his best ideas riding a horse. Bethoven needed to walk at night. An engineer who has invented several of his company's products told me that he gets his best ideas while driving. Having ridden in his car as a passenger I cannot forbear to say that I do not recommend this. Colin Cherry in a public lecture counselled against driving with the subconscious mind.

Most of us have been afflicted at some time by the "presque vu" experience. Sheridan in his own inimitable style commented "when an idea is slow to come a glass of good wine encourages it. When it has come a glass of good wine rewards it". This approach is not to be recommended. I know of no case where any useful purpose is served by trying to force the idea. Indeed this can often have the opposite effect. The ideas are almost ready to come into awareness but they will only come in a distorted form if incubation has

not been allowed to run its course. If ideas are forced into awareness prematurely the incubation period will have to begin all over again while the crossed lines are unscrambled. To try to force an idea during the "presque vu" experience is often seriously self defeating and we should never push a gifted student who is having this frustrating experience.

Periods of effort

Periods of effort are of necessity more protracted than periods of outpouring. During the periods of effort ideas are resolved into an acceptable form. The liberation of an idea is only the start of the process and this must be followed by weeks, months or even years of translating the liberated idea into an end product.

The diurnal variation affects when people do their best work. Bethoven worked from dawn until two o'clock in the afternoon. Balzac used to write his novels at night. Bryon did his best work at night. Continuity of attention is essential for some people. Newton, Descartes, Adam Smith, Mozart and Dickens are among those who found it necessary to work exclusively at one thing. There are others who need simultaneous attention. Southey would be working on two poems at the same time. Bethoven was working on four compositions at the same time. DeMusset believed that the mind would become dulled by too long attention to one subject and that change would enable the mind to see more clearly future developments and defects in the work. He would have a work of poetry and a work of prose going at the same time.

Distractions affect different people in different ways. If Tchaikowski was distracted he lost the thread of his ideas. Kant found it difficult to lecture because he was distracted by the scratching of pens when his students took notes. Mark Twain wrote a novel while his house was being renovated. He just shut out all the noise. An artist known to me tells me she does her best

painting either talking to a friend or with the phone in her left hand and painting with her right while talking to a friend.

Many people have worked out strategies for resumption. Sargeant would play the works of Fauré on the piano. Charlotte Bronte and Kipling both found it necessary to put the work away and do something else.

There are also general conditions for effort. Freud chain smoked while working out his ideas. Kant focused on a tower visible from his window. W.H. Auden needed coffee and tobacco to be able to work and Balzac needed strong black coffee. Dr. Johnson preferred tea and found that the purring of his cat stimulated the flow of ideas.

Isolating the conditions

Nothing but good can come of isolating the conditions under which you get your best ideas and under which you do your best work. It also helps to look at the conditions prior to a time when you got a good idea. This will give you clues to the conditions favourable to incubation. Very often people are not aware of these. Over a period of weeks I worked on this with Mary. All her ideas for paintings and designs had come to her during live concerts. She had never realized this until she reflected on it. She also found that her ideas were incubating when she took long walks alone. For example in Spain she had taken a walk in the country. While walking she found herself humming Noel Coward's song

Mad dogs and Englishmen

go out in the mid-day sun

That evening at an open air concert she had an idea for a series of paintings on the idiosyncrasies of the foreign tourist in Europe as seen through the eyes of a mad dog who was not really mad at all. There were numerous other examples of ideas incubating when she was walking alone in the country and

coming to the illumination stage when she was at a live concert. She had cut out concerts because she could ill afford them and cut out long walks because it was less than safe.

After counselling, although she was short of money she budgeted for regular trips to Boston where live concerts were available. Because in the part of America where she lived it was decidely risky for a young and, I have to say, attractive woman to be walking alone she acquired a large dog. As she herself put it "Anyone who tries anything on me will have sixty pounds of very angry dog to reckon with". The fact I want to stress is that before counselling she was totally unaware of the creative conditions operating in her life. It is my suggestion that we can help people to isolate the conditions that make for creative work in their lives.

Gerald found that his ideas were incubating when he was close to nature, he was very keen on mountain climbing. His ideas came into the illumination stage in the hypnagogic state (just before going to sleep). Of course it was an easy matter to show him that ideas were not going to come if he collapsed into bed or was put to bed thoroughly drunk and he did not need to be even mildly drunk. It worked. Swimming in a lake in Italy he had an image of an architecture student showing a young girl round an Italian cathedral. He also reflected that as a theme for a novel crises of faith among nuns has been done to death. Just before going to sleep that night he heard a conversation between the arhitecture student and the girl. They were talking about Hitler. The theme for his novel fell into place. Otto Sagen was a German student of architecture in 1938. He had a particular interest in Renaissance architecture. Not very interested in politics he still felt that Hitler would give Germans a better life and Hitler had restored national pride. Otto was in love with the Italian girl Gina but she was only fifteen. A correct upper

middle class German he would not allow himself to show it or even think it. The war came and Otto joined the army. In 1944 he was a Major in the occupation forces in Italy, sickened by Nazi-ism and war in general. He meet Gina. He deserted from the army and he and Gina hid out in the mountains in Northern Italy. They were both shot by the Italian partisans, he because he was a German and Gina because she was the putana of a German officer. Gina's father a doctor made no attempt to save her because she had loved a German. It is a powerful novel and it might never have been written had Gerald not done his own creative inventory.

Perhaps you will bear with me if I share with you how I isolated my own creative conditions. They are the creative conditions I know best.

I have kept an extensive and discursive diary since I was nineteen. Since it is also loaded with articles, papers, book reviews, charts, letters from friends and colleagues it is also a valuable reference. Studying it has enabled me to find out the conditions under which I do my best work. To describe them in some detail may help you to evaluate your own creative processes and enable you to help young people to do the same. If apologies are due for talking at length about myself I unreservedly offer them, but my creative inventory might help you compile yours.

i) I enjoy gardening and find very considerable satisfaction in attacking a miniature jungle and transforming it into an orderly garden. As an MA student in June 1960 and I was engaged in the last stages of producing an orderly garden for my landlady. Summer had really arrived and the sun was shining. While gardening I had a strong auditory image of Dr. Monica Lawlor of London University lecturing on imagery, this was followed by a visual image of several typed pages of a thesis on synaesthesia and the motivation to be creative. This was the start of my interest in the creative process and in 1962 I completed an MA on this.

ii. While working for Decca Navigator I had been preparing a two week management development course for managers most of whom had been trained as engineers. I had myself just attended a one month course on the administration of research and development and had been completely disenchanted, to such an extent that I left before the course was completed. I had made copious notes in my diary on what was wrong with the programme (what Wallas would call preparation). While at my parents home I had discussed this in the morning with my father. In the afternoon I was working in my father's garden again on a gloriously sunny day when I had a visual image of the managers from Decca Navigator participating in a new type of management game. I then had a visual image of my desk at Decca Navigator. On the desk was laid out the briefings and plans for this management game devised by myself. I later published a book on this type of management training.

iii. I went to California for Decca Navigator. The General Manager of a firm in the aviation industry had invited me one Sunday afternoon to his home. Jack had been a pilot in the U.S. Air Force for a number of years. At the age of 43 he left the Air Force and went into business. During the war he had served in England and married an English girl. We often hear that psychologists should not make value judgements but I have to make one. Jack and his English wife Carole were a delightful couple. Carole was an accomplished artist and I was impressed with her paintings. Jack was an active Anglican who had read widely and thought deeply into his religion. He had also read widely on American and English history and Mexican culture. We had a most stimulating discussion on a wide variety of topics. Later that afternoon Jack and Carole took me to a monastery built when California was a Spanish

colony. It was impressive. The California sun was at its best. While walking round the monastery gardens I heard myself telling my host and hostess "I'm working on a book" and I gave them an outline of what, with modifications, was later published as The Human Element in Management.

iv. A colleague at the University of New Brunswick had gone on six months study leave in Europe during the summer. I had agreed to keep an eye on his house. He was worried that his garden had degenerated into a wilderness. He had had neither the time nor the inclination to work on it. Gardening to him was in the nature of a penance. He asked me if I could get someone to attend to it. I said I would do it myself and had to assure him that I would enjoy it and would be most offended if he repeated his offer to pay me. Father Joe Higgins, then Professor of Theology at St. Thomas University in Fredericton, had preached a series of sermons on the uniqueness of individual gifts and the duty of Christians to develop these in themselves and others. I had told Father Higgins that I buy this idea 100% and had had several long discussions with him. While attacking waist high weeds, grass and briar strands I was reflecting on my most recent discussion with Father Higgins. After several hours of work I sat in a garden chair listening to my colleague's portable radio. I found that the radio was irritating me and I switched it off. I tried to read a book and was taking nothing in. I just sat back and enjoyed the sun. Watching the sailing boats on the Saint John River I had a visual image of the Contents pages, in my handwriting of what evolved into my book The Creatively Gifted.

v. I had been preoccupied for some time with the fact that conventional career search methods do not appear to work for the gifted. I had documented the reasons. I discussed this with my wife and over dinner with my wife and a highly respected mutual friend who is a school counsellor. A few evenings later it was a beautifully sunny day and I was gardening in the early evening. I suddenly had a visual image of a flip chart. On the first page was the words in blue letters Enriched Career Search - Module 1. Underneath were some details in red letters. In my imagination I turned the page and the next page bore the words in blue letters Enriched Career Search - Module 2 with some details in red letters. It is interesting and significant that the handwriting was my wife's. I continued to turn the pages and saw details of seven modules. The details of Modules 5 and 6 were blurred and I could not read them. I had to do a great deal of work before they were satisfactorily planned. There are other examples but these will suffice. When we have examples the next step is to look for the common links. In my case there can be no doubt that the common link is the sun. The sun not only gives me life it gives me the conditions for liberation of ideas.

My ideas are liberated in the late afternoon or early evening. I never get ideas in the hynagogic state (just before going to sleep). I am certainly not at my best first thing in the morning. The only ideas I get in the hypnopompic state are not repeatable in public. Joy in the morning is a scriptural concept which I can never experience and I only acknowledge that it can and does happen to other people.

New experiences are for me highly conducive to incubation. Ideas have been liberated in California, Devonshire, Switzerland and France. It is easy to miss common links and the search should be shared with a close friend. I

showed these and numerous other incidents to Father Marc Smith, Head of the Department of Philosophy at St. Thomas University. Father Smith is also my Confessor and thus knows me very well. He commented "I would never advise you to go to the Trappist Monastery at Chatham for enlightment". Father Smith saw a point I had missed. A condition conducive to incubation is constructive dialogue and interaction with people to whom I feel able to relate. I am very lucky. I have a few close friends with whom I am able to share most things. I have already noted that the images for Enriched Career Search came a few days after a discussion with my wife. There is an evident connection since the images were in her handwriting. However, I used to feel that I spend too much time on wide ranging discussions and not enough time at my desk. Now I seek out opportunities for evaluative dialogue as part of my work. One year I had planned to go to Rome with two very close friends. I had so much work on hand that I cancelled my trip. I now see that I was wrong. A new experience with friends with whom evaluative dialogue was possible might have aided whatever, if anything, was incubating at that time. New experiences and interaction with other people to whom I can relate are conditions conducive to incubation.

Let us now turn to periods of effort. As far as the diurnal variation is concerned I am a night owl. I do my best work in the evening and up to about 12:30 at night. In the morning and the early afternoon I usually do routine work. I am really ready to start any creative work at about four o'clock in the afternoon. During the University vacations I often work into the early hours of the morning, sleep until mid morning and do routine work in the early afternoon.

On the matter of simultaneous attention I must agree with de Musset, that too much attention to one work dulls the mind. I published two books in

1968. My colleagues said that this indicated how hardworking I am. I cannot accept the compliment. I had had both books going since 1964. Had I been able to give one my undivided attention would have probably have published one in 1965 and one in 1967. From 1976 to 1978 I had the first draft of The Creatively Gifted going along with the final draft of Understanding Management. At present I am writing a book and also making a series of films on Counselling. I need to have two things going at the same time. The point I want to stress is that before I studied R.E.M. Harding I used to feel that I must discipline myself and learn to stick at one thing and get it finished before starting something else. Since I was 14 my father had often urged this in strong terms. Several times I tried to do this and became tense and frustrated and the quality of work I did was completely unsatisfactory to me. I sometimes have two chapters of the same book going at the same time.

My distraction tolerance is almost non existent. The telephone or my neighbour's baby crying can cause me completely to lose the thread of my ideas. Someone coming into the room can completely disrupt the flow of work. I once shared a flat with someone who was writing a biography of an eminent religious and political leader. He had to have the record player going while he was working. When he had his conditions for creative work satisfied I could not work at all. I always handwrite my books. I find that the noise of my typewriter stifles the flow of ideas.

Resumption for me necessitates putting it away and doing something else.

I have gone into this at some length because I was largely unaware of these conditions until I read Harding and set myself to isolate them. Since then I have helped other young people to isolate their own conditions with the invariable result of an increase in output and output over which they tend to be satisfied.

I think the wide variety of conditions has been stressed sufficiently for the dangers of projection to be evident. My father needed continuity of attention and saw my need for simultaneous attention as sign that I was disorganized. What will work for one person will not work for another. I have mentioned an engineer who gets his best ideas while driving. He once told a subordinate whose ideas were refusing to come "take your car and just drive around until the ideas come." Conditions which will liberate the ideas of one person may not liberate the ideas of another. What is more conditions for the liberation of ideas may not be the same as conditions for resumption. The important thing is that the creatively gifted person should examine each of these variables and work out how they apply, if they apply, in his case. Many creatively gifted people find it enjoyable to keep an extensive diary. This can be a creative inventory. Looking back over such a diary the creatively motivated person can build up a picture of a number of things:-

what type of ideas or other stimuli evoke a response,

the nature of that response,

the common links in stimuli and responses,

the conditions under which ideas are liberated,

the conditions conducive to incubation,

the conditions most favourable to periods of effort,

the conditions necessary for resumption.

Contemporary Problems

With a few exceptions working organizations have completely failed to take account of conditions for creative work. Still less account is taken of their wide variety. Creatively gifted employees face the unspoken requirement that they all do their best work under the same conditions.

Continuity of attention is demanded. High distraction tolerance is a necessity. As for the diurnal variation and postural conditions people are required to be creative sitting at a desk between 9:00 in the morning and 5:00 in the evening. We have tried to unify the conditions and in doing so two groups of people lose, the creatively gifted themselves and those who stand to benefit from their creativity. Finally, at the World Conference in Montreal I was careless enough to say that I get some of my best ideas gardening. Seven people offered me the chance to be creative in their gardens. Sorry. There is ample creative scope in my own garden. Having answered that question if you have any other questions I will make an attempt to answer them.

REFERENCES

James, W. Great Men, Great Thoughts and Environment, Atlantic Monthly 46, 441-459, 1880.

Harding, R.E.M. An Anatomy of Inspiration, Cambridge: W. Heffer and Sons, 1940.

McKellar, P. Imagination of Thinking, London: Cohen and West, 1957.

Wallas, G. The Art of Thought, London: Watts, 1926.

Willings, D. The Human Element in Management, London: B.T. Batsford, 1968.

Willings, D. The gifted at work. Paper presented to Fourth World Conference on Gifted and Talented Children, Montreal, 1981.